HLAWKA, EDMUND: Filling and Covering of Convex Bodies Through Convex Bodies

HLAWKA; Edmund

Hlawka, Edmund.   Ausfüllung und Überdeckung konvexer Körper durch konvexe Körper.   Monatsh. Math. 53, 81–131 (1949).

Let $K = K(r, f)$ be a convex body in n-dimensional space, with the origin 0 as centre, defined by an inequality $f(x) = f(x_1, \cdots, x_n) \leq r$. Let

$$M = \sup_{\Gamma} \inf_{0 \neq x \in \Gamma} f(x), \quad \epsilon = \inf_{\Gamma} \sup_{z} \inf_{x \in \Gamma} f(x+z),$$

where Γ is an arbitrary lattice with determinant 1 and x and z are arbitrary points. The author proves that

$$1 \leq [1 - \tfrac{1}{2}(1 - \tfrac{1}{2}J^{1/n}M)^n]^{-1} \leq \epsilon^n J \leq (\tfrac{1}{2}n)^n M^n J \leq n^n,$$

where J is the volume of $K(1, f)$.

A set of bodies $K_i: f(x - p_i) \leq r$, $i = 1, \cdots, a$, is said to form a packing of a bodies K into a convex body B, if each K_i is contained in B and no two K_i have common inner points. A similar set K_i, $i = 1, \cdots, u$, is said to form a covering of B by u bodies K if each K_i contains an inner point of B and every point of B is contained in some K_i. A packing of K into B is said to be a lattice packing, if, for some lattice Γ and some point z, (i) $p_i = g_i + z$ for some g_i of Γ, and (ii) if $p + z\Gamma$ and the body $f(x - p) \leq r$ is contained in B, then p is one of the p_i. [The author omits the essential condition (ii); his definitions 5, 13 and 24 need appropriate modifications, and so do the proofs of theorems 5 and 26.] A lattice covering is defined similarly. Let $a(B, K)$ and $u(B, K)$ be the upper and lower bounds of the number of bodies K in the packings and coverings of B, respec-

tively. Let $a^*(B, K)$ and $u^*(B, K)$ be the corresponding bounds for the lattice packings and lattice coverings.

The author obtains both upper and lower bounds for both $a^*(B, K)$ and $u^*(B, K)$, which ensure that, if V is the volume of B, the limits

$$\Delta^* = \lim_{r \to \infty} a^*(B, K) Jr^n / V, \quad \vartheta^* = \lim_{r \to \infty} u^*(B, K) Jr^n / V$$

exist and have the values $(\tfrac{1}{2}M)^n J$ and $\epsilon^n J$. Further it is shown that

$$\Delta = \lim_{r \to \infty} a(B, K) Jr^n / V, \quad \vartheta = \lim_{r \to \infty} u(B, K) Jr^n / V$$

exist and are independent of B.

It is clear that $\Delta^* \leq \Delta \leq 1 \leq \vartheta \leq \vartheta^*$. Improved upper bounds for Δ and lower bounds for ϑ are found for certain classes of bodies K similar to those discussed by J. G. van der Corput and H. Davenport [Nederl. Akad. Wetenschi. Proc. 49, 701–707 = Indagationes Math. 8, 409–415 (1946); these Rev. 8, 317]. Other topics discussed are: upper bounds for Δ for spheres and cylinders; packings and coverings with convex bodies which do not have a centre; distributions of points $p_1, \cdots, p_s$ in B with $f(p_i - p_j) \geq d$, if $i \neq j$; packings in which at most $k-1$ bodies may overlap; coverings in which each point of B belongs to at least k bodies; packings and coverings with bodies, which are not all the same size, or which are selected from a set of bodies, not all the same shape; selection from coverings of systems of nonoverlapping bodies.   C. A. Rogers (Princeton, N. J.).

Hlawka, Edmund

Hlawka, Edmund. Über Integrale auf konvexen Körpern. I. Monatsh. Math. 54, 1–36 (1950).

Let B be a convex body in R_m and let the Gaussian curvature of its surface have a positive lower bound. Suppose the origin is an inner point of B and that $f(x)$ is the distance-function of B, where $x = (x_1, \cdots, x_m)$. Write dx for the element of volume and $lx = l_1 x_1 + \cdots + l_m x_m$, where $l = (l_1, \cdots, l_m)$. The author discusses integrals of the type $\int_B \Phi(f(x)) e^{ilx} dx$ subject to differentiability conditions on the surface of B and on the arbitrary function $\Phi(u)$, using the method of stationary phase.

For given unimodular matrix A, vector y, and real number $u \geq 0$, denote now by $\Phi(y, u)$ the number of integer vectors x satisfying $f^2(A(x-y)) \leq u$, i.e., $\Phi(y, u)$ is the number of lattice points in a body, u, times B displaced to Ay. Then, if $\Im$ is the volume of B, we have as $u \to \infty$,

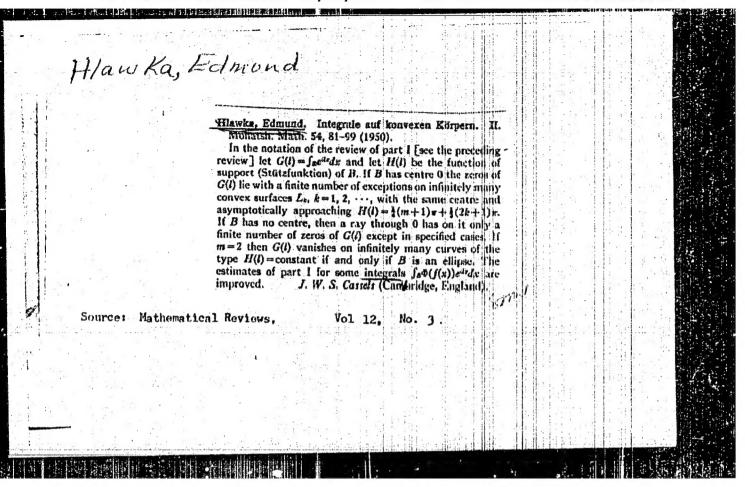(i) $\qquad \Phi(y, u) = \Im u^{m/2} + O(u^{m(m-1)/2(m+1)})$,

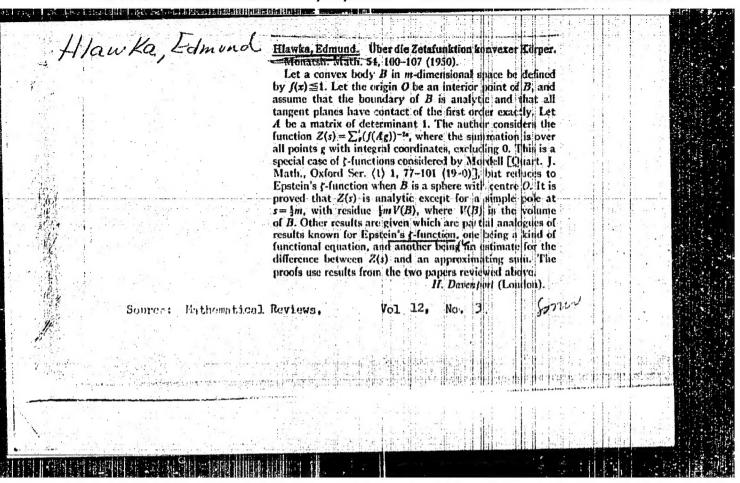(ii) $\qquad \Phi(0, u) = \Im u^{m/2} + \Omega(u^{(m-1)/4})$.

Source: Mathematical Reviews,   Vol 12, No. 3.
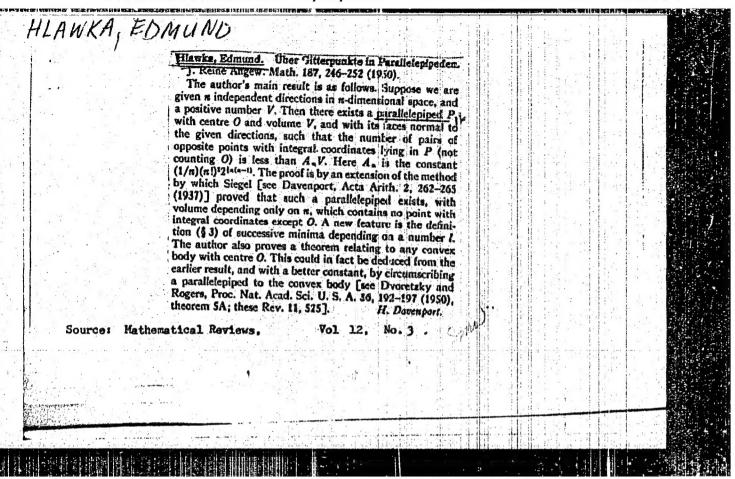
Let $\lambda(u) \nearrow \infty$ as $u \nearrow \infty$ and let $0 \leq \ell < 2/(m-1)$. Suppose u_r, $r = 1, 2, \cdots$, is a sequence such that $\sum \lambda_r^{-1-\ell}(u_r) < \infty$. Then (iii) $\Phi(y, u) = \Im u^{m/2} + O(u^{(m-1)/4} \lambda(u))$ for almost all y as r runs through the sequence u_r. The proofs depend on the estimates for integrals and are similar to the corresponding known proofs for ellipsoids [for (i) and (ii) see Landau, S.-B. Preuss. Akad. Wiss. 1915, 458–476; Nachr. Ges. Wiss. Göttingen. Math.-Phys. Kl. 1915, 161–171 (1915); and for (iii) see D. G. Kendall, Quart. J. Math., Oxford Ser. (1) 19, 1–26 (1948); these Rev. 9, 570]. An improvement of Minkowski's convex body theorem is also given for bodies B provided that the dimension-number $m \not\equiv 1 \pmod 4$. Independently of the above, a relation is given between the numbers of lattice points in two polar bodies, generalizing one of A. Gelfond [C. R. (Doklady) Acad. Sci. URSS (N.S.) 17, 447–449 (1937)] for parallelepipeds. The notation A^* for the transpose of A is used. In equation (3), page 21, read $k = A^{*-1}l$. This definition of k is tacitly assumed in §§ 6–10. There are further minor misprints.
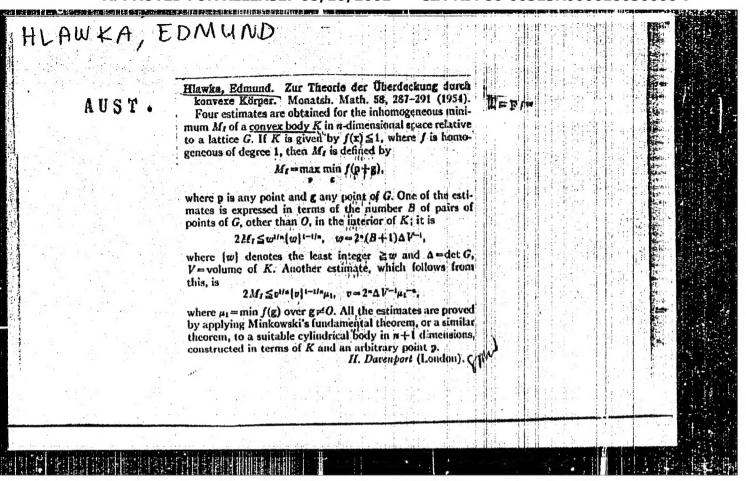
J. W. S. Cassels (Cambridge, England).

Hlawka, Edmund

Hlawka, Edmund. Integrale auf konvexen Körpern. II. Monatsh. Math. 54, 81–99 (1950).

In the notation of the review of part I [see the preceding review] let $G(l) = \int_B e^{ilx}dx$ and let $H(l)$ be the function of support (Stützfunktion) of B. If B has centre 0 the zeros of $G(l)$ lie with a finite number of exceptions on infinitely many convex surfaces L_k, $k = 1, 2, \cdots$, with the same centre and asymptotically approaching $H(l) = \frac{1}{2}(m+1)\pi + \frac{1}{2}(2k+1)\pi$. If B has no centre, then a ray through 0 has on it only a finite number of zeros of $G(l)$ except in specified cases. If $m = 2$ then $G(l)$ vanishes on infinitely many curves of the type $H(l) = $constant if and only if B is an ellipse. The estimates of part I for some integrals $\int_B \Phi(f(x))e^{ilx}dx$ are improved.   *J. W. S. Cassels* (Cambridge, England).

Source: Mathematical Reviews,   Vol 12, No. 3.

Hlawka, Edmund

Hlawka, Edmund. Über die Zetafunktion konvexer Körper. Monatsh. Math. 54, 100–107 (1950).

Let a convex body B in m-dimensional space be defined by $f(x) \leqq 1$. Let the origin O be an interior point of B, and assume that the boundary of B is analytic and that all tangent planes have contact of the first order exactly. Let A be a matrix of determinant 1. The author considers the function $Z(s) = \sum_{g}' (f(Ag))^{-2s}$, where the summation is over all points g with integral coordinates, excluding 0. This is a special case of ζ-functions considered by Mordell [Quart. J. Math., Oxford Ser. (1) 1, 77–101 (19–0)], but reduces to Epstein's ζ-function when B is a sphere with centre O. It is proved that $Z(s)$ is analytic except for a simple pole at $s = \frac{1}{2}m$, with residue $\frac{1}{2}m V(B)$, where $V(B)$ is the volume of B. Other results are given which are partial analogues of results known for Epstein's ζ-function, one being a kind of functional equation, and another being an estimate for the difference between $Z(s)$ and an approximating sum. The proofs use results from the two papers reviewed above.

H. Davenport (London).

Source: Mathematical Reviews,   Vol 12, No. 3

HLAWKA, EDMUND

Hlawka, Edmund. Über Gitterpunkte in Parallelepipeden. J. Reine Angew. Math. 187, 246–252 (1950).

The author's main result is as follows. Suppose we are given n independent directions in n-dimensional space, and a positive number V. Then there exists a parallelepiped P, with centre O and volume V, and with its faces normal to the given directions, such that the number of pairs of opposite points with integral coordinates lying in P (not counting O) is less than $A_n V$. Here A_n is the constant $(1/n)(n!)^2 2^{1+(n-1)}$. The proof is by an extension of the method by which Siegel [see Davenport, Acta Arith. 2, 262–265 (1937)] proved that such a parallelepiped exists, with volume depending only on n, which contains no point with integral coordinates except O. A new feature is the definition (§ 3) of successive minima depending on a number l. The author also proves a theorem relating to any convex body with centre O. This could in fact be deduced from the earlier result, and with a better constant, by circumscribing a parallelepiped to the convex body [see Dvoretzky and Rogers, Proc. Nat. Acad. Sci. U. S. A. 36, 192–197 (1950), theorem 5A; these Rev. 11, 525]. *H. Davenport.*

Source: Mathematical Reviews,   Vol 12, No. 3 .

HLAWKA, EDMUND

AUST.

Hlawka, Edmund. Zur Theorie der Überdeckung durch konvexe Körper. Monatsh. Math. 58, 287–291 (1954).

Four estimates are obtained for the inhomogeneous minimum M_f of a convex body K in n-dimensional space relative to a lattice G. If K is given by $f(x) \leq 1$, where f is homogeneous of degree 1, then M_f is defined by

$$M_f = \max_p \min_g f(p+g),$$

where p is any point and g any point of G. One of the estimates is expressed in terms of the number B of pairs of points of G, other than O, in the interior of K; it is

$$2M_f \leq w^{1/n}\{w\}^{1-1/n}, \quad w = 2^n(B+1)\Delta V^{-1},$$

where $\{w\}$ denotes the least integer $\geq w$ and $\Delta = \det G$, $V =$ volume of K. Another estimate, which follows from this, is

$$2M_f \leq v^{1/n}\{v\}^{1-1/n}\mu_1, \quad v = 2^n \Delta V^{-1} \mu_1^{-n},$$

where $\mu_1 = \min f(g)$ over $g \neq O$. All the estimates are proved by applying Minkowski's fundamental theorem, or a similar theorem, to a suitable cylindrical body in $n+1$ dimensions, constructed in terms of K and an arbitrary point p.

H. Davenport (London).

HLAWKA, EDMUND

Hlawka, Edmund. Folgen auf kompakten Räumen. Abh. Math. Sem. Univ. Hamburg 20 (1956), 223–241.

The author generalizes ideas and theorems centering around the definition by which a real sequence $x_1, x_2, \cdots$ is called uniformly distributed mod 1 if

$$\lim_{n\to\infty} \lambda_n(f) = \lim_{n\to\infty} \frac{f(x_1) + \cdots + f(x_n)}{n} = \int_0^1 f(x)\,dx = \mu(f)$$

whenever f is a continuous function having period 1. Instead of requiring $x_1, x_2, \cdots$ to be real numbers reduced mod 1, he requires them to be elements of a compact space X having a countable basis. Instead of considering only arithmetic means, he introduces a real matrix $A = (a_{nk})$ for which $\sum_{k=1}^\infty |a_{nk}| \leq M < \infty$ and $\sum_{k=1}^\infty a_{nk} \to 1$ as $n \to \infty$. Let $M(X)$ denote the weakly topologized space of all linear continuous functionals (or Radon measures) $\mu(f)$ defined over the vector space $C(X)$ of functions $f(x)$ which are real and continuous over X. Attention is then formed upon the linear functionals $\sum_{k=1}^\infty a_{nk} f_k(x)$ in $M(X)$ and their weak limit points. If μ is a functional in $M(X)$ and $n(1), n(2), \cdots$ is an increasing sequence of integers such that

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Hlawka, Edmund

$$\lim_{p \to \infty} \sum_{k=1}^{} a_{n(p),k} f(x_k) = \mu(f) = \int_X f \, d\mu$$

for each f in $C(X)$, then μ is called an A-distribution (A-Mass) of the sequence $x_1, x_2, \cdots$. The paper contains 20 theorems involving existence, uniqueness, and other properties of these A-distributions. Several of these involve methods and results closely related to work of J. D. Hill [Ann. of Math. (2) 46 (1945), 556–562; Pacific J. Math. 1 (1951), 399–409; 4 (1954), 227–242; MR 7, 153; 13, 340; 15, 950] on the Borel property of transformations of sequences of zeros and ones.   *R. P. Agnew.*

HLEBANJA, J.

"Compendium on coupling technique" by Stübner-Rüggen. Reviewed by
J. Hlebanja. Stroj vest 8 no.4/5:116 O '62.

HLEBANJA, J.

"Machine construction norms for study and practice." Reviewed by J. Hlebanja. Stroj vest 9 no.4/5:131   O   '63.

"Welding technical standards and directions." Reviewed by J. Hlebanja. Ibid.:131-132

"Föttinger couplings and Föttinger gears" by E. Kickbusch. Reviewed by J. Hlebanja.   Ibid.:133

HLEBANJA, Joze, doc. inz.

The passenger cable railway on Popova Sapka Mountain. Stroj vest
8 no.6:181-184 D '62.

1. Fakulteta za strojnistvo, Ljubljana.

CERNIGOJ, B.; SELJAK, Z.; NOVAK, P.; PUST, J.; MUREN, H.; CPRESNIK, M.;
        KUHELJ, A.; HLEBANJA, J.; KRUSIC, B.; POVSE, R.; KRAUT, B.;
        PROSENC, V.; PRELOG, E.

Book reviews. Stroj vest 10 no.6:176-182 D '64.

EXCERPTA MEDICA Sec 13 Vol 13/6 Dermatology   June   59

1633. A PECULIARITY OF LATE SYPHILIS WITH A REPORT OF A CASE
(Bulgarian text) - Petkov I. and Hlebarov St. Sci. Res. Inst. for Skin
and Ven. Dis., Sofia - SAVR. MED. 1958, 9/5 (105-108) Illus. 4

A report is given of a case of late syphilis, in which there was at the same time an
enormous gumma the size of a child's head on the back, and an ulcerogummatous
lesion on the chest. These gummatous lesions developed in a period of 6 months,
one after the other, and 35 yr. after the onset of the disease. Treatment with peni-
cillin-bismuth rapidly led to cure of the skin lesions.

Balabanoff - Sofia

SARIC,Marko,dr.; HLEBEC,Franjo,dr.

Studies on the incidence of kidney diseases in the rural population
exposed to lead.   Lijec. vjes. 81 no.7-8:457-464 '59.

1. Iz Instituta za medicinska istrazivanja Jugoslavenske akademije
znanosti i umjetnosti i Centralnog bigijenskog zavoda NR Hrvatske.
        (KIDNEY DISEASE etiol.)
        (LEAD POISONING compl.)

MIKIC, E., dr.; ĐERĐĆ, F., dr.

Systolic blood pressure in normal patients and nephritis patients. Vojnosanit Pregl. 20 no.10:645-649 O '63.

HLEBEC, Milan, ing.

Signal and control equipment in modern weaving mills. Automatika 2
no.1:36-38 Ap '61.

(Automatic control)   (Weaving)

HLEBEC, Milan, ing.

Conference on automation in the textile industry of Yugoslavia.
Automatika 2 no.1:54 Ap '61.

(Automation)   (Yugoslavia—Textile industry)

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˛ater tower as a multipurpose construction. Ind ˛˛˛ ˛ ˛ ᵗ˛˛˛
˛˛0-252 ˛˛ ˛ᵃᵢ.

.. Hydroprojekt, Bratislava.

HLEDIK, E.

Retrograde invagination of the jejunum into Braun's anastomosis.
Cesk. rentgen. 17 no.4:258-260 Jl '63.

1. Klinicka zakladna rentgenologicke katedry UDL v nemocnici
v Praze na Bulovce, vedouci MUDr. J. Slanina. Klinicka
zakladna chirurgicke katedry UDL v nemocnici v Praze na
Bulovce, vedouci prof. dr. J. Knobloch, DrS.
        (INTUSSUSCEPTION)   (JEJUNUM)
        (GASTROENTEROSTOMY)
        (POSTGASTRECTOMY SYNDROMES)
        (RADIOGRAPHY)

HLEDIK,E.; VOJTECH,K.; FOJTIK,F.

Traumatic lung changes following closed thoracic injuries.
Cesk. rentgen. 18 no.2:116-120 Mr'64.

1. Klinicka zakladna rentgenologicke katedry UDL v Praze
(vedouci: MUDr. J.Slanina) a Detske chirurgicke oddeleni
v nemocnici v Praze na Bulovce (vedouci: MUDr. F.Fojtik)

R/003/60/011/005/007/023
A125/A026

AUTHOR: Hlevca,B., Engineer

TITLE: Copolymerization by "Grafting" (Grefare) Under the Action of Ioniz-
          ing Radiations

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 5, p. 276

TEXT: This is an extract of an article, the origin of which is not men-
tioned. The article shows that ionizing radiation has found wide application in
macromolecular chemistry. It lists a series of applications and presents the
possibility of a new technology such as the polymerization by "grafting" (gre-
fare). After briefly referring to the procedure of polymerization by "grafting",
the author examines the behavior of macromolecules polycondensed by "grafting"
and lists the advantages of the copolymerization by ionizing radiation. He also
indicates the most usual ways for the production of "grafted" copolymers. Be-
fore describing the properties of the copolymers obtained, he briefly presented
the mechanism of the "grafting" reaction. There are two mechanisms possible in
function of the operation conditions. Finally, he presents the properties of the
"grafted" copolymers in general.

Card 1/1

HLEVCA, B

AUTHOR: Name given

TITLE: Meeting of the Chemical Industry

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 5, pp. 299 - 3?2

Card 1/2

TEXT: In the meeting on "Radioisotopes in Research and Chemical Industry" [text illegible] held on March 1 - 8, 1960, organized by [illegible] ...

Card 2/2

HLEVCA, G.

A new rapid method for the gravimetric copper determination. P. Spacu and G. Hlevca (Polytech. Inst., Bucharest, Romania). Acad. rep. populare Romane, Bul. stiint., Seç. stiint. teh. si chim. 5, 93-7(1953).—Cu can be detd. rapidly gravimetrically, with a relative error rarely as high as 0.5% (2-10 mg. Cu^{++} to be detd.) by adding NH_3 to the Cu^{++} soln. till $Cu(NH_3)_4^{++}$ has been formed, which soln. is then mixed with a 2% soln. of $NH_4[Cr(SCN)_4(NH_3)_2]$ to ppt. $[Cu(NH_3)_4][Cr(SCN)_4(NH_3)_2]_2.5H_2O$ which is filtered off, washed with a 0.1% soln. of $I + NH_3$, then with EtOH Et$_2$O, then with Et$_2$O, and then is dried in vacuo.

Werner Jacobson

HLEUCA, G.

2180. New rapid method for the gravimetric estimation of thallium. P. Spacu and G. Hleuca (Bucharest, Romania). *Stud. Cercet. Chim.*, Bucharest, 1955, 8 (3–4), 203–207.—Thallium is pptd. quant. as the complex Tl[Cr(SCN)$_4$(NH$_3$)$_2$] by the addition of a 3·5% aq. soln. of Reinecke's salt to an acid, neutral or feebly alkaline soln. of Tl'. After filtration, the ppt. is washed with ethanol and with ether, and is dried in a vacuum desiccator. The estimation can be carried out in the presence of most common ions, but Pb interferes. The analysis requires 60 to 70 min. — J. H. WATON

A new gravimetric method for the determination of oxalic acid. P. Spacu and Maria Hârceu (Inst. Polytech. Bucharest, Romania), *Acad. Rep. Populare Romane, Bul. Stiinf., Ser.: Mat., Fiz., Chim.* 2, 677-81(1950)(French summary).—To an aq. soln. of oxalic acid or Na oxalate, add NH_4OH until the pH reaches 8.3 (phenolphthalein indicator). Add a concd. soln. of [Cu(NH$_3$)$_4$NO$_3$]Cl$_2$ until pptn. is complete. After 1 hr. filter through a filter crucible A$_4$ and wash with 15-20 ml. of water contg. 1.25 g. reagent + a few drops NH_4OH in 1000 ml. H_2O, with 1-3 ml. H_2O, then twice with 3 ml. of 96% EtOH, and finally 3 times with 1 ml. of Et$_2$O. Dry the ppt. for 30 min. in a vacuum desiccator and weigh as [Cu(NH$_3$)$_4$NO$_3$]C$_2$O$_4$. The reagent is prepd. as described by Jörgensen. The presence of NO$_3^-$, Cl$^-$, Na$^+$, K$^+$, and NH$_4^+$ does not interfere. Sulfates interfere only when exceeding by more than 5 times the quantity of oxalate; citric and tartaric acid disturb unless the ratio between acids and oxalate is 1:1. Gerhard Auzinger

Hlevca, M.

A new method for the gravimetric determination of silver.
P. Spacu and M. Hlevca. Comun. Acad. Rep. Populare
Romîne 3, 311–15 (1950). — Ag was detd. gravimetrically by
treating the aq. soln. of Ag^+ with a 15% soln. of K xanthate
at room temp. The yellow ppt. of Ag xanthate is insol. in
H_2O, ether, or alc. After addn. of 2 drops of an aq. pyri-
dine soln., the ppt. is filtered through a porcelain filter and
washed in distd. H_2O, alc., and ether. François Kertesz

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PM

HLEVCA, M.

Complex compounds of some thiocyanates and metallic halogens with the hydrazide of isonicotinic acid. Note I. Studii cerc chim 9 no.3: 547-556 '61.

1. Laboratorul de chimie anorganica, Institutul politehnic, Bucuresti.

RAVAR, I., candidat in stiinte economice; HLEVCA, M.

Problems of the balance of branch relations. Probleme
econ 15 no.7:17-30 Jl '62.

SCHNAPP, Bernard (Bucuresti); HLEWING, SALO (Bucuresti)

Methods of ecologic research on small mammals. Natura
Geografie 12 no. 6:80-82 N-D '60.

HLIBOWICKI, Roman

POLAND/Soil Science - Cultivation, Amelioration, Erosion.   J-4

Abs Jour   : Ref Zhur - Biol., No 2, 1958, 5807

Author   : Hlibowicki, Roman
Inst   : -
Title   : Field Shape and its Relation to Soil Mass Displacement

Orig Pub   : Roczn. nauk rolniczych, 1955, F71, No 1, 89-110

Abstract   : This is a discussion of the results of a comparison of
              geodesic photographs in the Svidnitsa rayon taken in 1935
              and 1955 on slopes with up to 12% of slant. On clayey til-
              led soils an average of 16 mm. was removed every year
              through erosion. The author considers irrational methods
              of tillage on slopes to be the fundamental reason for the
              onset of intensive erosion. It is recommended that the
              boundaries between separate fields always be horizontal.
              The necessity of introducing into Polish agricultural le-
              gislation various regulations requiring measures to be un-
              dertaken against erosion on slopes is noted.

Card 1/1

HLINÁK, L.

H

267. PRODUCTION OF PURIFYING MATERIAL AND AMMONIUM SULPHATE FROM WASTE FERROUS SULPHATE. Prchlik, J., Hlinak, L., and Kurejcvyn, J... (Paliva (Fuel, Prague), June 1955, vol. 35, 157-162). A description is given of a purifying agent for use in the gas industry and of its production from commercial ferrous sulphate simultaneously with the production of ammonium sulphate. A proposed plant layout is shown. It is also proposed to use ferrous sulphate for the purification of waste ammoniacal waters at small gas works; the ammonia will be converted in the water into ammonium sulphate and the water will be used as a fertilizer. (L.).

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618030006-7

S/137/62/000/009/005/033
A006/A101

AUTHOR: Hlineny, Jaroslav

TITLE: Desulfuration in electric-slag remelting

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1962, 40 - 41, abstract
           9V260 ("Sb. vědec. praci Vysoké školy banské Ostravě", 1961, v. 7,
           no. 2, 239 - 244, Czech; summaries in Russian and English)

TEXT: Desulfuration of metal in electric slag remelting is analyzed. De-
sulfuration is studied both from the viewpoint of the molecular theory of S dis-
tribution between the metal and slag, and from the viewpoint of the ionic theory.
It is shown that S is eliminated from the slag due to its oxidation on the slag
pool surface by air O_2. The author observes that S can not be carried away from
the slag by the formation of volatile F-compounds. The analysis of the desul-
furation process from two viewpoints made it possible to explain satisfactorily
the different desulfuration degree when using d-c of direct and reverse polarity.
An attempt is made of explaining the problem of a fuller desulfuration by using
a-c, as compared with desulfuration on d-c. There are 14 references.
[Abstracter's note: Complete translation]   D. Kashayeva

Card 1/1

S/137/62/000/012/009/085
A006/A101

AUTHORS: Bůžek, Z., Hliněný, J.

TITLE: Energy balances and the possibility of reducing heat losses in
               electric-arc steelmelting furnaces

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 46,
               abstract 12V292 ("Sb. vědec. prací Vysoké školy báňské Ostravé",
               1961, v. 7, no. 7, 735 - 748; Czech; summaries in Russian and
               English)

TEXT: The authors studied heat losses through cooling water and the fur-
nace surface on 3 - 6-ton furnaces. Measures are recommended to reduce heat
losses.

                                                    D. Kashayeva

[Abstracter's note: Complete translation]

Card 1/1

S/137/62/000/012/008/085
A006/A101

AUTHORS: Bůžek, Z., Hliněný, J., Schindlerová, V.

TITLE: Operational conditions of steelmelting arc-furnaces

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 46,
             abstract 12V291 ("Sb. vědec. prací Vysoké školy báňské Ostravé",
             1961, v. 7, no. 7, 749 - 789, Czech; summaries in Russian and
             English)

TEXT: The authors studied problems connected with the setting-up of ef-
ficient operational conditions for steelmelting arc-furnaces. Different methods
of determining efficient operational conditions are compared. Information is
given on A. N. Sokolov's (simplified) method which expresses the specific effi-
ciency and electric power consumption as functions of the mean active power of
the unit; this method is sufficiently reliable to determine efficient operation-
al conditions. The operational conditions established by this method should be
checked with the aid of specified operational characteristics or on the basis of
theoretical operational characteristics.
                                            D. Kashayeva

[Abstracter's note: Complete translation]
Card 1/1

BUZEK, Z.; HLINENY, J.

Intensification, mechanization and automation of steel pro-
duction in electric arc furnaces. Sbor VSB Ostrava 9 no.1:
7-23 '63.

HLINENY, J.; KOUDELKA, M.

Contribution to the problem of determining the electric ope-
ration of arc furnaces. Sbor VSB Ostrava 9 nc.1:93-114 '63.

HLINENY, J.; BUZEK,Z.; WHEELER, F.

Problems of automatic control of the electrode motion of electric arc furnaces. Sbor VSB Ostrava 9 no.1:115-140 '63.

Comparison of the various methods of automatic control of the motion of electrodes used in arc furnaces in Czechoslo-vakia.   141-161

HLINENSKY, F.

"For socialist highway transportation." p. 6
"Will we succeed in the mechanized drying of bricks?" p. 6
" Rationalizers' movement managed collectively." p. 7
(Technicke Noviny, ol. 1, No. 16, Dec. 1954, Praha)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 6, June.
                                                    1954, Uncl.

S/194/62/000/010/008/084
A154/A126

AUTHORS: Hliněnský, Ferdinand, Zahradník, Miroslav

TITLE: A device for converting a graphic recording (image) into an electric voltage

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 19 - 20, abstract 10-1-38ch (Czech. pat., cl. 42d, 3/25; 42d, 1/15, no. 98978, March 15, 1961)

TEXT: A patent is granted for a device for direct conversion of graphic recordings (images), e.g., oscillographic, mechanical or photographic recordings, into an electrical voltage. The device dispenses with the need for mathematical processing and the use of qualified manpower. The essence of this invention (see Figure) consists in the use of a rotary drum (1) whose lateral surface has slits (2) running parallel to the drum's hollow rotating axle (3). The axle (3) is rotated by an electric motor (5) through a transmission mechanism (4). Inside the drum (1) there is a photocell (6) fixed on a holder (7) through which wires (13) are led to the photocell (6). On the mounting board (8) of the de-

Card 1/3

A device for converting a graphic recording ....

S/194/62/000/010/008/C54
A154/A126

vice there is an illuminating unit consisting of a lamp (9), a ground-glass screen (10), and a frame (11) serving to hold the image (12). The illuminating unit is enclosed by a casing (14), the drum (1) is covered by a cover (15). The graphic image, taken from the measuring instrument, is made by any suitable method, so that its width corresponds to the distance between neighboring slits (2). The lower part of the image is blacked out, and the upper part is cut around its contour, after which the image is inserted in the frame (11). When the drum (1) rotates, the luminous flux from the lamp (9), falling onto the photocell (6) through the slit (2), is proportional to the ordinate of the graphic (12); the voltage appearing at the photocell output is thus proportional to this ordinate and can be used for any purpose. In a variant of the device it is pointed out that the illuminating unit and the photocell can be mounted inside the drum, external mirrors being used for reflecting the rays coming from the image onto the photocell. There are 2 figures.

I.P.

[Abstracter's note: Complete translation]

Card 2/3

Z/059/62/000/003/003/007
D406/D301

AUTHOR: Hliněnský, Ferdinand

TITLE: Strain gages as sensors for automatic control of
                 service-life program tests

PERIODICAL: Zpravodaj VZLÚ, no. 3, 1962, 95-100

TEXT: The VZLÚ (Aeronautical Research and Test Institute)
developed a standard strain-gage unit which has been used since 1960
for automatic program tests to determine the service-life of aircraft
components. The entire test unit consists of an electrical, hydrau-
lic and loading system. This article deals only with the electrical
system which, in turn, consists of a standard strain-gage apparatus
with a balanced bridge and a strain-gage dynamometer. The four
major components of the strain-gage apparatus, i.e. the control,
safety, program, and registration unit, are built into the drawers
of a cabinet and can individually be exchanged. The control unit is
equipped with a slightly modified "SA 1" bridge, and serves the limi-
tation of applied forces or cyclic loading; the safety unit protects

Card 1/2

Strain gages as sensors ...

Z/059/62/000/003/003/007
D406/D301

the tested parts from overloading (+ 10%); the program unit gener-
ates the electrical signals for the hydraulic loading device accord-
ing to an arbitrary program, picked-up by phototransistors from a
2-m film loop with a total of 400 program cycles; the registration
unit permits numerical counts, signalization, oscillographic repre-
sentation, and punched-tape recording. The dynamometers are placed
in the resultant force which loads the tested parts. The loads ex-
ert a mechanical stress on the gage, the resistance of the strain
gage changes, and the bridge is counterbalanced at loading intervals.
Most suitable for control purposes is a bridge with the very precise
zero method. The load-control accuracy is ± 3%. The described test
unit can also be expanded (two bridges, one for control, the other
for balancing) for symmetrical control of two forces, or for non-
symmetrical loading with more forces of arbitrary mutual proportion.
The strain-gage test unit was successfully used in fatigue tests of
"L 200" aircraft parts, but can also be used in similar tests by
other mechanical-engineering shops. A similar apparatus of improved
design, suitable for more complex test programs, is currently being
developed. There are 17 figures and 4 references. (Technical edi-
tor: Ing. Zdeněk Klima).

Card 2/2

Z/032/62/012/006/002/002
E197/E435

AUTHOR: Hlinĕnský, F.

TITLE: Automatic equipment for the life test of small
           transport aircraft

PERIODICAL: Strojírenství, v.12, no.6, 1962, 443-449

TEXT: The article describes the equipment developed for the
fatigue testing of the light transport aircraft by a programme
which simulates the actual stresses during flight and landing.
For a period corresponding to a 1.5 h flight there is first a
steadily rising load to a maximum value of 1472 kg, followed by
72 cycles of oscillating load between zero and full load, and
finally a landing load of 1109 kg.   The whole cycle is repeated
until either a predetermined number of cycles is reached or
failure occurs.   Provision is made against accidental overload.
The equipment was designed for universal programmes and
consists of 3 basic systems: the electric system which controls
the magnitude and sequence of load,   the hydraulic system which
provides the force and a linkage system for exerting the load on
the test piece.   The programming medium is a 2 m long loop of
35 mm film (400 cycles), black or white spaces acting on a set of
Card 1/3

Automatic equipment ...

Z/032/62/012/006/002/002
E197/E435

5 phototransistors.   The cycles in each of these channels are
counted.   The maximum loading frequency is 1 c/s,   the uniformity
of individual cycles 1%,   the stability over 24 hours better than
3%.   Input: 20 A at 24 V.   The load is measured by resistance
strain gauges in a bridge circuit, which is set to be in balance
at a limiting load and a slight increase will cause a moving coil
relay to actuate power circuits, the electromagnetic valves of the
hydraulic system and a change-over to the next step.   There is
an independent supervisory system which prevents overload and
indicates failure in the actuating system and stops the programme
on failure of the actuating system or of the test-piece.   The
pressure in the hydraulic system is monitored and will stop the
programme on overload.   Light signals are associated with the more
important circuits, which indicate whether load is rising or
falling;   failures, including that of the lamp illuminating the
programming film, are displayed by illuminated panels and
supervised by an alarm system.   The hydraulic system has an input
of 15 kW, the pump has an output of 35 litres/min.   The
distribution box for the individual hydraulic circuits is
Card 2/3

Automatic equipment ...

Z/032/62/012/006/002/002
E197/E435

controlled by electromagnetic valves.   The linkage between
the hydraulic system and the fuselage consists of standard
hydraulic cylinders.   The equipment was designed and put into
operation in 1960 for testing the aircraft L200.   Two other
systems but with different programmes are used for aircraft
Ae 45 and L 13.   Future developments envisaged are a
transistorized measuring bridge, an extension of programming
facilities by the use of a magnetic band, and heavier loads.
The moving coil meters will be replaced by measuring instruments
with phototransistors for control.   There are 17 figures.

ASSOCIATION: VZLÚ , Letňany

Card 3/3

ACC NR: AP6026308   SOURCE CODE: CZ/0034/66/000/008/0524/0532

AUTHOR: Hlineny, Jaroslav; Buzek, Zdenek

ORG: VSB, Ostrava

TITLE: Desulfurizing effect of electroslag melting

SOURCE: Hutnicke listy, no. 8, 1966, 524-532

TOPIC TAGS: steel, steel melting, electroslag melting, desulfuriza-tion, steel desulfurization

ABSTRACT: The effect of slag composition, furnace atmosphere, current type (ac or dc) and current polarity on the depth of desulfurizing action of electroslag melting has been investigated. It was found that though the most complete desulfurization was achieved with a calcium fluoride-base slag containing 20—40% lime, the desulfurizing capacity of slags is not the most important factor. The most complete desulfurization takes place when sulfur which passed from metal to slag is oxidized by oxygen of the furnace atmosphere at the slag-atmosphere interface. . Therefore, the desulfurization in argon atmosphere was less complete than that in air atmosphere. The initial sulfur content of 0.023% was reduced to 0.017—0.021% in argon com-pared to 0.015—0.020 in air. Reversed-polarity dc and ac were equally

Card 1/2

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ACC NR: AP6026308   0

effective; both were more effective than straight-polarity dc. The
initial sulfur content of 0.037% was reduced to 0.015% with reversed-
polarity dc and ac and to 0.028% with straight-polarity dc. Orig. art.
has: 5 figures and 10 tables.   [DV]

SUB CODE:11,13/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 003/
SOV REF: 013/ ATD PRESS:5057

Card 2/2   hs

SVENTSKIY, Ye. [Swiecki, E.]; KILINYAK, A. [Hliniak, A.]; KOYRO, M.A.
[translator]

Results X-ray treatment of patients with breast cancer during an
8-year period. Vop.onk. 5 no.11:524-528 '59.   (MIRA 14:7)

1. Iz Instituta onkologii (dir. - Ye.Sventskiy), Glivitsy, Pol'skaya
Narodnaya Respublika.
             (BREAST—CANCER)   (X RAYS—THERAPEUTIC USE)

HL *INIAK, A*

4004. JASIŃSKI W., HLINIAK A., ŚWIECKI J. and WIECKOWSKA Z. Inst. Onkol., Gliwice. *Leczenie nieoperacyjnego raka sutka promieniami Roentgena X-ray treatment of inoperable cancer of the breast* Pol. Tyg. lek. 1957, 12/15 (553–554)

The results of treatment of 114 cases of inoperable cancer of the breast (1947–1950) treated by X-rays are presented. Tumour dose was 4500–6000 r. In 2.7% of cases necroses of soft tissues were noted; 20% of the patients survived 5 yr. after the treatment without signs of recurrence or metastases.

HLINIAK, Andrzej

Radiotherapy in cancer of the bladder by means of implanting of Au-198 seeds. Nowotwory 12 no.4:281-289 '62.

1. Z Instytutu Onkologii Oddzial w Gliwicach Dyrektor: dr med. J. Swiecki.
(BLADDER NEOPLASMS)   (GOLD ISOTOPES)

HLINIAK, Andrzej

Early results of treatment of cancer of the bladder by means of Au-198 seeds. Nowotwory 12 no.4:291-299 '62.

1. Z Instytutu Onkologii Oddzial w Gliwicach Dyrektor: dr med. J. Swiecki.
      (BLADDER NEOPLASMS)   (GOLD ISOTOPES)

HLINIAK, Andrzej; TININ, Juliun; WISNIOWSKI, Bogdan; ECKI, Wladyslaw
....

Some notes on the role of the P-32 test in the diagnosis of
malignant melanoma. Nowotwory 14 no.4:341-344 C-D '64

1. Z Instytutu Onkologii w Gliwicach (Dyrektor: dr. med.
J. Swiecki).

HLINIAK, Andrzej; DARLEWSKI, Jerzy; HLINIAK, Irena; LOBARZIEC, Wlodzimierz;
    WOJCIESZEK, Zbigniew; PETRYNA, Alicja.

    Comparison of the size of x-ray irradiation fields to the route
    of metastases of cervical cancer. Nowotwory 34 no.3:237-240
    Ag-S '64.

    1. Z Zakladu Rentgenoterapii Instytutu Onkologii w Gliwicach
    (Kierownik: dr. med. A. Hliniak; Dyrektor: dr. med. J.Swiecki).

HLINIAK, Andrzej, dr. med.

The problem of the dose-time relationship in the treatment of mycosis fungoides. Nowotwory 15 no.1:81-84   Ja-Mr'65.

1. Z Zakladu Rentgenoterapii Instytutu Onkologii w Gliwicach (p.o. kierownika: dr. med. A. Hliniak; dyrektor: dr. med. J. Swiecki).

CRITICAL, [illegible text]

[illegible text]
[illegible text]
1/4-[illegible text] FWH.

1. Z [illegible text]
[illegible text]).

HLINIAK, Andrzej; DOBROWSKI, Jerzy; HLINIAK, Irena; LOBODZIEC, Wlodzimierz;
   WOJCISZEK, Zbigniew; PETRYNA, Alicja

   Depth and exposition of the rectum and bladder in x-ray therapy
   of cancer of the cervix uteri. Nowotwory 14 no.4:417-421 O-D '64

   1. Z Zakladu Roentgenoterapii Instytutu Onkologii w Gliwicach
   (Kierownik: dr.med. A. Hliniak; Dyrektor: dr. med. J.Swiecki).

HLINIAK, Andrzej

   Radiotherapy of cancer of the bladder. Wiad. lek. 18 no.13:
   1097-1098 1 Jl '65.

HLINIAK, Andrzej

Application of megavoltage therapy in the treatment of
malignant neoplasms. Wiad. lek. 18 no. 23:1795-1796
1 D ' 65.

HLINIAK, A.

The evaluation of the conventional X-ray therapy in the
treatment of bladder carcinoma. Cesk. radiol. 20 no.1:
17-20 Ja '66.

1. Instytut Onkologii w Gliwicach.

HLINIAK, Andrzej; DANECKI, Jerzy; HLINIAK, Irena; LOBODZIEC, Wlodzimierz;
WOJCIECHOZEK, Zbigniew; PETRYNA, Alicja

Depth and exposition of the rectum and bladder in x-ray therapy
of cancer of the cervix uteri. Nowotwory 14 no.4:417-421 C-D '64

1. 2 Zakladu Roentgenoterapii Instytutu Onkologii w Gliwicach
(Kierownik: dr.med. A. Hliniak; Dyrektor: dr. med. J.Swieski).

HLINIAK, Irena; VORBRODT, Janina; WIECZORKIEWICZ, Anna; KOZLIK, Ryszard

Statistical analysis of results in the treatment of cervical cancer according to material of the Institute of Oncology in Gliwice during 1947-1952. Nowotwory 11 no.3/4:329-337 '61.

1. Z Instytutu Onkologii — Oddzial Gliwice Dyrektor: dr med. J. Swiecki.

(CERVIX NEOPLASMS ther)

VORBRODT, J.; WIECZORKIEWICZ, A.; HLINIAK, I.

Relation of therapeutic methods to results in the treatment of cervi-
cal cancer in the Institute of Oncology in Gliwice. Polski przegl.
radiol. 25 no.3:475-484 My-Je '61.

1. Z Instytutu Onkologii w Gliwicach Dyrektor: dr med. J. Swiecki.

(CERVIX NEOPLASMS radiother)

HLINIAK, Andrzej; DARLEWSKI, Jerzy; HLINIAK, Irena; WOJCIESZEK, Kazimierz;
     WOJCIESZEK, Zbigniew; PETRYNA, Alicja.

     Comparison of the size of x-ray irradiation fields to the route
     of metastases of cervical cancer. Nowotwory 14 no.3:217-250
     Ag-S '64.

     1. Z Zakladu Rentgenoterapii Instytutu Onkologii w Gliwicach
     (Kierownik: dr. med. A. Hliniak; Dyrektor: dr. med. J.Skierski).

WIECZORKIEWICZ, Anna; HLINIAKOWA, Irena; VORBRODTOWA, Janina

Complications following radiotherapy of cervical cancer and effect of
general conditions of the patient before therapy on the survival
according to material of the Institute of Oncology in Gliwice.
Nowotwory 12 no.2:131-138 '62.

1. Z Instytutu Onkologii Oddzial w Gliwicach Dyrektor: dr med.
J. Swiecki.
    (CERVIX NEOPLASMS radiother)   (RADIOTHERAPY compl)

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... . of the skin in ....
no. 2:1 17-120 '64.

.. . .

HLINIAKOWA, Irena

Postradiation complications following the treatment of cervical
cancer records of the Institute of Oncology at Gliwice in the
years 1953-1955. Nowotwory 15 no.1:47-57 Ja-Mr'65.

Our experiences in the treatment of the cancer of the uterine
cervix using Manchester method. Ibid.:59-64

1. Z Instytutu Onkologii w Gliwicach (Dyrektor: dr. med.
J. Swiecki).

HLINIAKOWA, Irena; STARKIEWICZ, Hanna

Relation of therapeutic effects on the cytological picture in
elderly breast cancer patients. Nowotwory 15 nc.3:279-282
Jl-S '65.

1. Z Instytutu Onkologii w Gliwicach (Dyrektor: dr. med.
J. Swiecki).

HLINKA, L. ; KARTAKOVA, D. ; PRCHLIK, J.

Obtaining sulfur from gas scrubber waste by extraction.
p. 298. Vol. 34, no. 11, Nov. 1954. PALIVA, Praha.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956.

LEDVINKOVA, B., MUDr.; HLINOVSKY, M., MUDr.

Preventive examinations for adolescents. Cesk. zdrav. 11
no.4:179-181 '63.

1. KUNZ Stredoceskeho kraje - KUNZ Severoceskeho kraje.
        (PHYSICAL EXAMINATION)   (PREVENTIVE MEDICINE)
                    (SCHOOL HEALTH)

HLINOVSKY, V.

Operational control of plan implementation and estimates of plan implementation indexes of railroad construction departments. II. Use of selective methods in estimating the building plan implementation indexes. p. 184.

ZELEZNICNI DOPRAVA A TECHNIKA. (Ministerstvo dopravy)
Praha, Czechoslovakia
Vol. 7, no. 6, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.
Nov. 1959
Uncl.

HLINOVSKY, Vladimir, inz.

Economic research on motor-truck transportation in enterprises of construction industry. Inz stavby 9 no.10 suppl.:112-114 O '61.

1. Vyzkumny ustav stavebni vyroby, Praha.

HLINOVSKY, Vladimir, ins.

Economic research on moter-truck transportation in enterprises of construction industry. Ins stavby 9 no.11 suppl.:128-131 N '61.

1. Vyzkumny ustav stavebni vyroby, Praha.

HLINOVSKY, Vladimir, inz.

    Establiszment of operational economic indexes of mechanization
and enterprise transportation and their use in operational
economic research. Stav. vyzkum. no. 5/6:13-19 '62

    1. Vyzkumny ustav stavebni vyroby, Praha.

HLINOVSKY, Vladimir, inz.

Economic analysis of the automobile transportation in the
building industry. Poz stavby 11 no.4:213-219 '63.

1. Vyzkumny ustav stavebni vyroby, Praha.

... ..., ...

... ... and economic investigations ... ...
transportation in the building industry. ... ...
... ...

... ... Institute of Building, ...

BLINC... Isr Isin, Inz.

> Operational and economic examination of earthwork machines. Inz
> stavby 12 no.10: Suppl: Mechanizace no.10:158-161 '64.

> 1. Research Institute of Building Construction, Prague.

HLINOVSKI, Vladimir, inz.

Operational and economic investigation of the building machinery
for concrete and masonry works. Inz stavby 13 no.1 Suppl Mechanizace
no.1:2-5 '65.

1. Research Institute of Building Construction, Prague.

HLINSKY, Vladislav; PhD. Emil, inz.; Plzen, Mirovice

   Polymin FL, an agent for increasing the board production.
   Papir a celulosa 20 no.3;70-72 Mr '65.

   1. Severoceske papirny, Stetl.

HLINSTAK, A.

TECHN LOGY

Periodical: KVASNY PRUMYSL. Vol. 4, no. 10, Oct. 1958

HLINSTAK, A.; Kroupa, J. Calculation of basic figures and determination of indexs
in the Soviet system of management and accountancy. p. 245.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3
                                                 March 1959, Uncl.

DEAK, Bertalan, fomernok; FUKSZ, Pal; HLINYANSZKI, Istwan, dr.;
    SZANISZLO, Andras; ZACHEMSZKI, Ferenc; ELSZASZ, Rezso.

    Analytic investigations, instrumentation. Energia es atom
    17 no.1:27-30 Ja'64.

    1. Pecsi Kokszmuvek (for Deak).

PORA, Ferenc, okleveles mernok; RAPP, Tamas; BORBAS, Nandor; NAGY BIRO,
        Sandor; HLINYANSZKY, Istvan, dr. SCHUMICZKY, Imre; KERTESZ, Gabor;
        SIMEK, Rezso, okleveles vegyeszmernok; JANCSO, Tibor; TOTH, Istvan;
        AUERSWALD, Janos; KLAFFL, Gyula; CSERNAVOLGYI, Laszlo.

        Production and utilization of natural gas. Energia es atom
        17 no.1:11-15 Ja'64.

        1. Orszagos Koolaj- es Gazipari Troszt (for Pora, Kertesz,
        Auerswald and Klaffl). 2. Voros Csillag Trakrogyar (for Borbas).
        3. Fovarosi Gazmuvek (for Nagy Biro).; 4. Asvanyolajforgalmi
        Vallalat (for Hlinyanszky). 5. Dunai Vasmu (for Schumiczky).
        6. VEGYTERV (for Simek and Csernavolgyi).

POLAND

GRABECKI, Jerzy and HLISNIK, Maria, Municipal Analytical
Laboratory (Miejskie Laboratorium Analityczne) in Chorzow
(Director: Dr. med. Jerzy GRABECKI)

"Simple and Rapid Murxide Method for Determining Calcium in
Serum."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 34, 19 Aug 63,
pp 1271-1273

Abstract: [Authors' English summary modified] The authors
tested the simple and rapid muroxide method (Harper) for the
determination of calcium in serum and found the results
lower than those by the author. Tho describe their modifica-
tion of the method and their findings. Significance of the
differences from the standard are analyzed, and the authors
note that their studies on the method are continuing. There
are 8 references, of which two are Polish and the others
Western.

1/1

GRABECKI, Jerzy; HLISNIK, Maria

A simple and rapid murexide method for the determination of
calcium in the blood serum. Pol. tyg. lek. 18 no.34:1271-1273
19 Ag '63.

1. Z Miejskiego Laboratorium Analitycznego w Chorzowie;
kierownik: dr med. Jerzy Grabecki.
            (CALCIUM)   (BLOOD CHEMICAL ANALYSIS)
                (INDICATORS AND REAGENTS)

HLISNIKOVSKY, JOSEF.

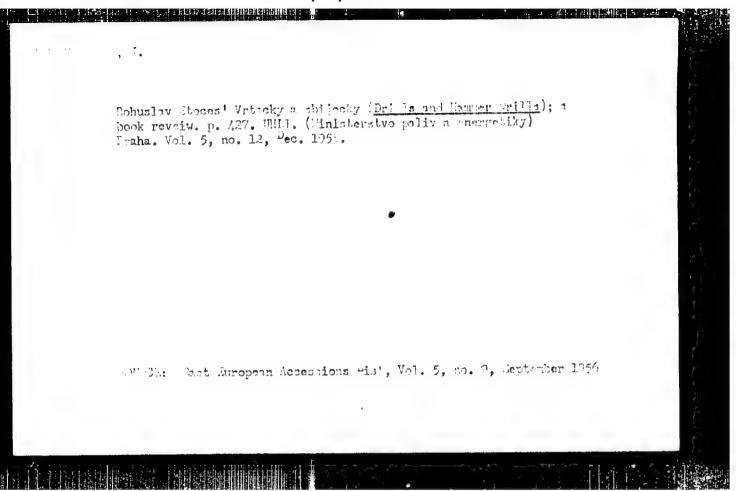"Dulni kombajny. (Praha) Osveta (1951) 15 p. (Edice prednasek pro osvetove besedy, 1951) (Mining combines. illus.)"

SO: East European Accessions List, Vol 3, No 8, Aug 1954.

...., ..

"Ostravan 500, first Czechoslovak coal combine."
Uhli, Praha, Vol 3, No 5, May 1953, p. 132

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

HLICHTA, V. aX, ..

"What was the development of the Soviet mining industry last year?"
Uhli, Praha, Vol 3, No 10, Oct. 1954, p. 275

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

Bohuslav Stoces' Vrtacky a sbijecky (Drills and Hammer Drills); a
book reveiw. p. 427. HULI. (Ministerstvo paliv a energetiky)
Praha. Vol. 5, no. 12, Dec. 1954.

.W'Th: 'ast European Accessions List', Vol. 5, no. 9, September 1956

MIKH... SM, .

A conference on the contemporary problems of ... ...
(Chim, Vol 6, No. 1, Apr. 19??, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 1?, Dec. 19??, Unel.
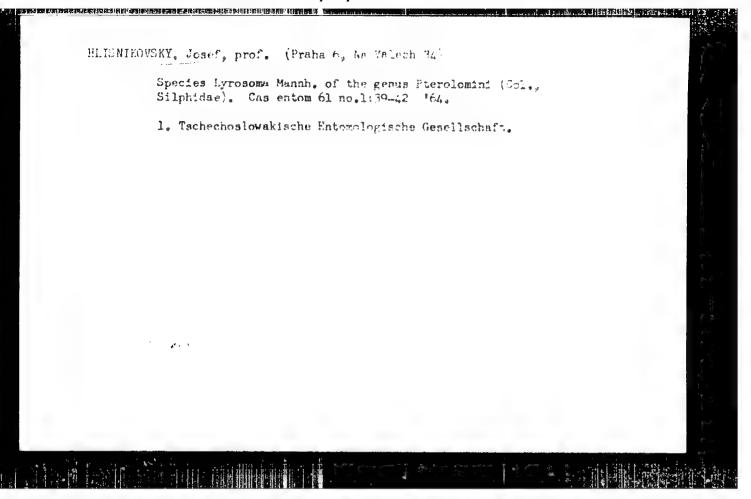
HLISNIKOVSKY, Josef

Dobyvaci stroje a zarizeni v hlubinnych a povrchovych dolech. (Mining Machinery and Installations in Underground and Strip Mines. 1st ed. illus.) Prague, UTEIN, 1957. 197 p.

Bibliograficky katalog, CSR, Ceske knihy, No. 36. 15 Oct 57. n. 787.

HLISNIKOVSKY, Josef, prof., inz. (Praha 6, Na Valech 34)

> The 2d contribution to the knowledge of the tribe
> Agathidiini (Col., Liodidae): the Sphaeroliodes
> Portevin genus. Cas entom 60 no.1/2:140-144 '63.
>
> 1. Tschechoslowakische Entomologische Gesellschaft.

HLINIKOVSKY, Josef, prof. (Praha 6, Na Valech 34)

    Species Lyrosoma Mannh. of the genus Pterolomini (Col.,
Silphidae). Cas entom 61 no.1:39-42 '64.

    1. Tschechoslowakische Entomologische Gesellschaft.

HLINOVSKY, Vladimir, inz.

Operational and economic test of earthwork machines. Inz stavby 10
no.8:Suppl.:Mechanizace no.8:87-91 '62.

1. Vyskumny ustav stavebni vyroby, Praha.
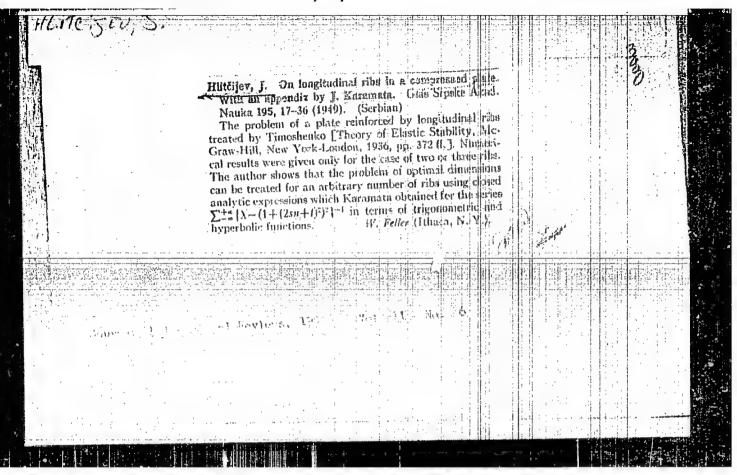
HLINOVSKY, Vladimir, inz.

Operational and economic examination of earthmoving machines.
Inz stavby 10 no.9:Suppl: Mechanizace no.9:104-107 '62.

1. Vyzkumny ustav stavebni vyroby.

HLISTA, Jaroslav

Device for machining internal spherical surfaces. Stroj
vyr 12 no.3:204 '64.

1. Nova hut Klementa Gottwalda, National Enterprise,
Kuncice.

Hütčijev, J. On longitudinal ribs in a compressed plate. With an appendix by J. Karamata. Glas Srpske Akad. Nauka 195, 17–36 (1949). (Serbian)

The problem of a plate reinforced by longitudinal ribs treated by Timoshenko [Theory of Elastic Stability, Mc-Graw-Hill, New York-London, 1936, pp. 372 ff.]. Numerical results were given only for the case of two or three ribs. The author shows that the problem of optimal dimensions can be treated for an arbitrary number of ribs using closed analytic expressions which Karamata obtained for the series $\sum_{-\infty}^{+\infty} [\lambda - (1 + (2n+1)^2)^2]^{-1}$ in terms of trigonometric and hyperbolic functions. *W. Feller* (Ithaca, N.Y.)

HLITČIJEV, J

*Illitčijev, J. Poglavlja iz teorije elastičnosti sa primo-nania. [Chapters from the Theory of Elasticity with Applications]. 2d ed. Naučna Knjiga, Belgrade, 1950. viii+216 pp. (Serbo-Croatian)

Source: Mathematical Reviews,   Vol   No. 1

"Calculation of the Strength of Ships' Plates."   p. 1, (ZBORNIK, 1952/53.
Beograd, Yugoslavia.)

SO: Monthly List of East European Accessions, (EEAL), LC,
Vol. 4, No. 5, May 1955, Uncl.

HLIZA   V.

COUNTRY   : Rumania
CATEGORY   :

ABS. JOUR. : RZKhim., No.   16 1959, No.   58772

           :
           :
TITLE   : Cellar Treatment of Wines at the Fruct-export
              Distillery in Focsani

ORIG. PUB. : Gradina, via si Livada, 7, No 11, 26-30 (1958)

ABSTRACT   : Following clarification with bentonite, the wines
              are filtered, blended, vacuum-cooled until fine
              crystals of water begin to form, and transferred
              to constant-temperature tanks with linings of
              'prodorglas' and external air cooling, in which
              the wine is kept for 7-14 days; at the end of
              that period the wine is filtered, passed through
              heat exchangers, and pumped into the finished
              product tanks. Low-alcohol content wines are
              concentrated before transfer to the constant-

CARD: 1/2

COUNTRY   : Rumania   A-27
CATEGORY   :

ABS. JOUR. : RZKhim., No. 16 1959, No.   56772

AUTHOR   :
INST.   :
TITLE   :

ORIG. PUB. :

ABSTRACT   :temperature tanks by centrifugation during which
             50% of the water is removed as ice.
                                       A. Maria

CARD: 2/2
                         351

HLOBILEK, Josef, inz.

Strength problems in the joint of cylindrical shell and
the bottom due to the internal pressure. Zpravodaj VZLU
no.6:3-9 '61.